



**Hyde County Emergency Services Department
Division of Code Enforcement
30 Oyster Creek Road
Post Office Box 95
Swan Quarter, N. C. 27885
Office—252-926-4372 Fax—252-926-3701**

Fire Suppression Flows

Section 508 of the N. C. Building Code, Volume V requires that sufficient water sources be available for fire suppression of all new buildings. The amount of water required is found in Appendix B. The public water systems in Hyde County will not provide the required water flow. The Fire Chief of the responding fire department is empowered by Volume V to reduce the required water flow in rural areas where the flows are impractical. Accordingly, the Inspections Department must contact the Fire Chief for every Commercial Building Permit Applicant to request a waiver.

To promote consistency, the recommendation of the Inspections Department to the Fire Chiefs in Hyde County is based upon the following standard.

A - If a structure has a designed occupant load of less than 100, is single story, and is not an area of Assembly, Educational, Institutional, Residential, or Hazardous, the water flow requirements will be waived.

B - If a structure is of type Assembly, Educational, Institutional, Residential, or Hazardous; is multi-story, or has an Occupant Load of 100 (for types Business, Factory, Mercantile, Miscellaneous and Storage), then the waiver will be allowed provided one of the following is installed (listed in order of preference):

- 1 - Fire Suppression System with Private Water Source
- 2 - 6" Dry Fire Hydrant in a Static Water Source within 500 ft
- 3 - Fire Detection and Monitoring System

A Fire Suppression System creates the maximum safety effect and is obviously preferred where possible. The Dry Fire Hydrant generally creates an abundant supply of firefighting water when possible. In the absence of the earlier choices, early detection of a fire will mitigate the lack of water supply. Additional reasoning is that the public safety resources in Hyde County are extremely limited.

Hyde County Emergency Services Department

PO Box 95
Swan Quarter NC 27885
252-926-4372-Office
252-926-3701-Fax



Donna Hodges Deputy EM
David Edgar Administrator
John Myers Deputy Fire Marshal
Hyde County Emergency Services
John Gibbs GIS/911

Typical Dry Hydrant Guidelines

Dry Hydrants are intended to provide a reliable fire flow for fire department usage. The diagram below is an example of a typical application. For additional information, you may also refer to NFPA 1142. Generally, the fire fittings and strainers are purchased from a fire equipment company and all other components purchased from a building supply or hardware store.

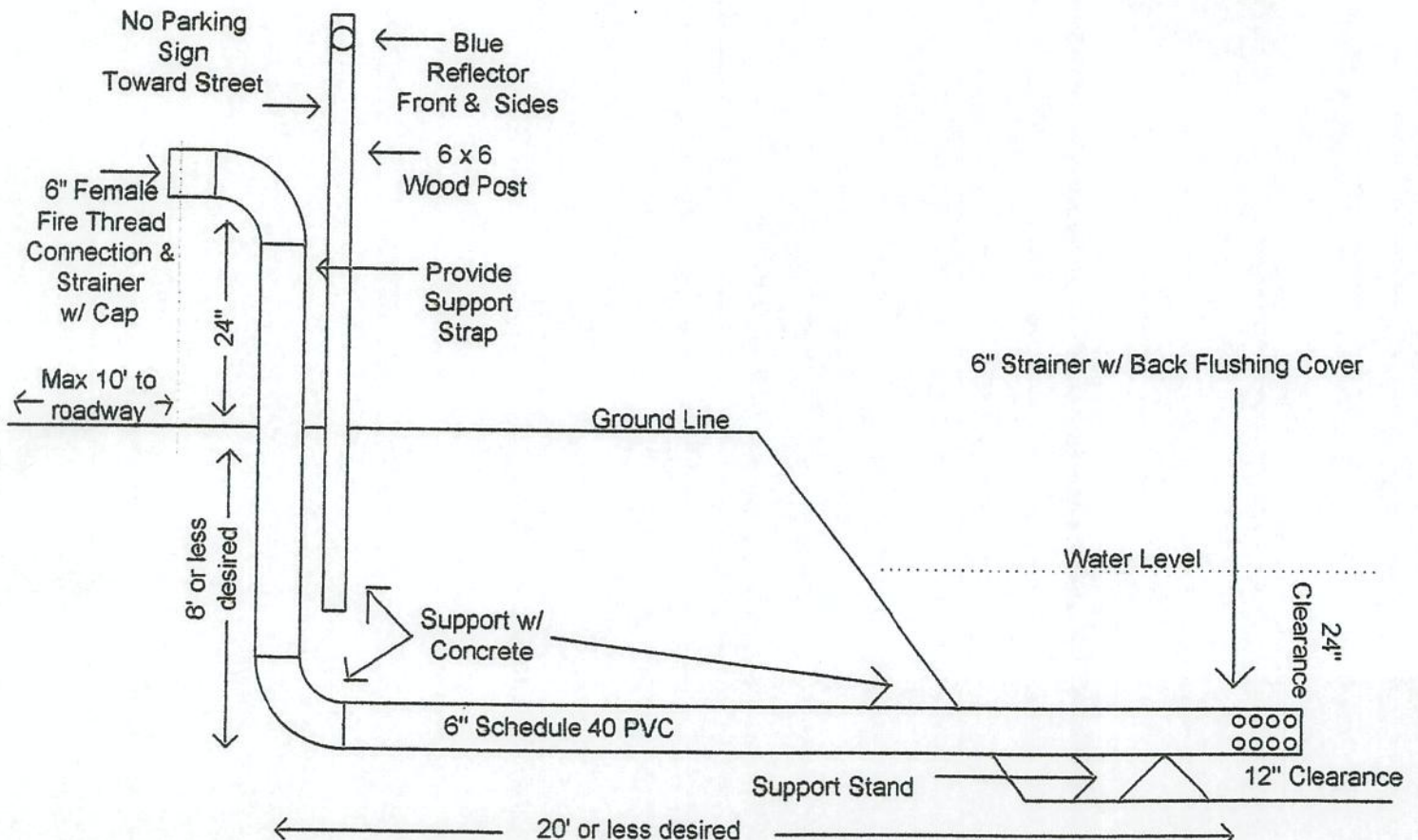
Although you may certainly use the vendor of your choice, the following companies are provided for your information if you need help in locating a vendor.

Eastern Fire Equipment
Kinston, NC
252-527-0201

C. W. Williams
Rocky Mount, NC
800-277-3473

W. S. Darley & Co.
Melrose Park, IL
800-323-0244

Permit and inspection of installation is required. For additional information, please contact the Inspections Department.





Hyde County Inspections Department

PO Box 95, Swan Quarter, NC 27885

Telephone: (252) 926-4172

Fax: (252) 926-3708

E-mail: hydeinsp@beachlink.com

Dean Garbage
Chief Building Inspector

Paul Spencer
Secretary

Mitigating Fire Flow Requirements

All regulated facilities are required to provide the required fire flows per Section 508 of the N. C. Fire Prevention Code. The required flow is obtained from Table B105.1 in Appendix B.

The Hyde County and Ocracoke Water Systems are incapable of providing the flows in all scenarios. Therefore, in accordance with B103, the appropriate Fire Chief had to be contacted to provide a waiver of the requirements. Since this waiver must then be obtained for every regulated facility, Hyde County Inspections and the Hyde County Fire Chiefs have created a Standard Procedure for mitigating fire flow requirements.

The following Occupancies have no mitigating requirements and are waived:

A-1, A-2, A-3, A-4 ...	Calculated Occupant Load < 100
A-5	All of non-combustible construction
B	Calculated Occupant Load < 100 and < 50 above 1 st Floor
F-2	< 3000 square feet
M	< 5000 square feet
S-2	< 3000 square feet
U	< 5000 square feet

All other Occupancies (E, F-1, H, I, S-I) and those exceeding the above limits must mitigate fire flows.

The owner may select one of mitigating options to obtain the waiver. The selection should be documented to the Inspections Department prior to permit issuance, and all installations must be in accordance with applicable codes. The options are listed in preferential order.

- A - Private Fire Suppression System
- B - Dry Fire Hydrant in year round standing water < 500 ft
- C - Automatic Fire Detection and Monitoring System
- D - System Fire Hydrant, installed by the appropriate water system, on the applicable lot and no less than 75' or more than 125' of the main entrance. (The owners will be responsible for all costs involved.)